## REMARKS

### STATUS OF CLAIMS

Claims 1-9 were pending and stand rejected. By this Response, claim 1 has been amended and claims 10-19 have been added. Therefore, claims 1-19 are now presented for consideration.

### REJECTION UNDER 35 USC § 103(a)

On pages 2-5 of the Office Action, numbered paragraph 3, claims 1-9 were rejected as being anticipated by Siddiqui (US Patent No. 5,912,661). Reconsideration is respectfully requested.

Siddiqui discloses a z-encoder for a computer input device, which includes a wheel button that is supported on an axle or spindle within the housing of the input device. The axle is supported in the housing by spaced-apart axle supports. The axle supports are configured to allow one end of the axle to move in a direction perpendicular to the axis of rotation of the wheel button such that the wheel button may be depressed, tilting the axle slightly. A spring mounted within the housing is arranged to resist depression of the wheel button. An optical encoder may be positioned on the axle for rotation with the wheel button. A light source and a light sensor may be mounted within the housing so as to sense the motion of the optical encoder to provide a positioning signal (see Siddiqui Abstract). The Siddiqui z-encoder does not suggest or teach "a plurality of rotating bodies disposed along a circumferential edge of said wheel, and rotatable on said circumferential edge as an axis of rotation" (see claim 1). The Siddiqui z-encoder can only provide data with respect to the rotating directions and distances due to the wheel, and in contrast to the present invention recited in claim 1, Siddiqui, which does not even suggest the rotating bodies on the circumferential edge of the wheel, can not provide data with respect to the rotating directions and distances of these rotating bodies.

The present invention recited in claim 1, as amended, includes the above-mentioned distinguishing features of "a plurality of rotating bodies disposed along a circumferential edge of said wheel, and rotatable on said circumferential edge as an axis of rotation" (see claim 1), which provides the important result of providing rotation data for two axes of rotation, namely rotation of the rotating bodies along the circumference of the wheel and also rotation of the

rotating bodies around the circumference of the wheel (see specification page 8, line 27 to page 9, line 5 and Fig 11). This means that the coordinate input device according to the present invention of claim 1 has the advantage of providing not only data with respect to the rotating directions and distances due to the wheel, but also data with respect to the rotating directions and distances due to the rotating bodies.

**CONCLUSION**

Neither, Siddiqui nor any other prior art reference either taken alone or in combination suggest or teach the above-mentioned distinguishing features.

Accordingly, claim 1 patentably distinguishes over the prior art and should be allowable. Claim 10 which includes at least similar features as claim 1, should also be allowable for at least similar reasons. Claims 2-9. and 11-19, which depend directly or indirectly from claims 1 and 10, should also be allowable for at least the same reasons as claims 1 and 10, as well as for the additional features recited therein. Reconsideration is respectfully requested

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that affect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters. If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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## VERSION WITH MARKINGS TO SHOW CHANGES MADE

**IN THE CLAIMS:**

Please AMEND claim 1 and ADD new claims in accordance with the following:

1. (ONCE AMENDED) A coordinate input device having a wheel that can be operated through rotation, comprising:

a plurality of rotating bodies disposed along a circumferential edge of said wheel [for rotation], and rotatable on said circumferential edge as an axis of rotation; and

rotating body rotating state detection means for detecting the rotating state of said rotating bodies.

2. (AS UNAMENDED) A coordinate input device as set forth in Claim 1, wherein said coordinate input device has a left click switch as a first switch and a right click switch as a second switch, said coordinate input device further comprising:

a third switch disposed as a lower portion of said wheel,

a wheel support portion having a construction to supporting said wheel and allowing said wheel to slide and adapted to drive said third switch by depressing said wheel downwardly; and

third switch operating state detection means for detecting the operating state of said third switch.

3. (AS UNAMENDED) A coordinate input device as set forth in Claim 2, wherein

said wheel support portion further comprises a ratchet construction on the side of said wheel, and wherein

said wheel is adapted to fit in said ratchet construction.

4. (AS UNAMENDED) A coordinate input device as set forth in Claim 1, wherein

an inner wall at a center of said respective rotating bodies through which said circumferential edge is put has a locking construction, and wherein

said circumferential edge is adapted to fit in said second locking construction.

5. (AS UNAMENDED) A coordinate input device as set forth in Claim 1, wherein

said rotating body is of a cylindrical configuration.

6. (AS UNAMENDED) A coordinate input device as set forth in Claim 1, wherein said rotating body is of a spherical configuration.

7. (AS UNAMENDED) A coordinate input device as set forth in Claim 1, wherein a surface of said rotating bodies is covered with a slip preventive material.

8. (AS UNAMENDED) A coordinate input device as set forth in Claim 1, wherein a recess is formed in the surface of said rotating bodies.

9. (AS UNAMENDED) A coordinate input device as set forth in Claim 1, wherein said coordinate input device further comprises:

ball moving state detection means for detecting the moving state of a ball;

click switch operating state detection means for detecting the operating state of a click switch; and

wheel rotating state detection means for detecting the rotating state of said wheel, said coordinate input device further comprising:

a format change-over switch; and

data transmission means for transmitting respective pieces of information detected by said respective detection means as a set of operation instructions for a computer and adapted to effect transmission in a first format when said format change-over switch is not depressed and to effect another transmission in a second format when said format change-over switch is depressed.

10. (NEW) A coordinate input device having a wheel that can be operated through rotation, comprising:

a plurality of rotating bodies disposed along a circumferential edge of said wheel and rotatable on said circumferential edge as an axis of rotation; and

a rotating body rotating state detection unit detecting the rotating state of said rotating bodies.

11. (NEW) A coordinate input device as set forth in claim 10, wherein said

coordinate input device has a left click switch as a first switch and a right click switch as a second switch, said coordinate input device further comprising:

a third switch disposed as a lower portion of said wheel;

a wheel support portion to support said wheel and to allow said wheel to slide and adapted to drive said third switch by depressing said wheel downwardly; and

a third switch operating state detection unit detecting the operating state of said third switch.

12. (NEW) A coordinate input device as set forth in claim 11, wherein said wheel support portion further comprises a ratchet construction on a side of said wheel, and wherein said wheel is adapted to fit in said ratchet construction.

13. (NEW) A coordinate input device as set forth in claim 10, wherein an inner wall at a center of said respective rotating bodies through which said circumferential edge is put has a locking construction, and wherein said circumferential edge is adapted to fit in said second locking construction.

14. (NEW) A coordinate input device as set forth in claim 10, wherein said rotating body is of a cylindrical configuration.

15. (NEW) A coordinate input device as set forth in claim 10, wherein said rotating body is of a spherical configuration.

16. (NEW) A coordinate input device as set forth in claim 10, wherein a surface of said rotating bodies is covered with a slip preventive material.

17. (NEW) A coordinate input device as set forth in claim 10, wherein a recess is formed in a surface of said rotating bodies.

18. (NEW) A coordinate input device as set forth in claim 10, wherein said coordinate input device further comprises:

a ball moving state detection unit detecting the moving state of a ball;

a click switch operating state detection unit detecting the operating state of a

click switch;

a wheel rotating state detection unit detecting the rotating state of said wheel;

a format change-over switch; and

a data transmission unit transmitting information detected by each of said respective detection units as a set of operation instructions for a computer and adapted to effect transmission in a first format when said format change-over switch is not depressed to effect another transmission in a second format when said format change-over switch is depressed.

19. (NEW) A coordinate input device as set forth in claim 10, wherein said coordinate input device further comprises:

a format change-over switch; and

a data transmission unit transmitting information detected by each of said respective detection units as a set of operation instructions for a computer and adapted to effect transmission in a first format when said format change-over switch is not depressed to effect another transmission in a second format when said format change-over switch is depressed.